



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/923,880      | 08/07/2001  | Thane M. Larson      | 10012570-1          | 9747             |

7590 01/04/2006  
HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, CO 80527-2400

EXAMINER

SURYAWANSHI, SURESH

ART UNIT PAPER NUMBER

2115

DATE MAILED: 01/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |  |                     |  |
|------------------------------|------------------------|--|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> |  | <b>Applicant(s)</b> |  |
|                              | 09/923,880             |  | LARSON ET AL.       |  |
|                              | <b>Examiner</b>        |  | <b>Art Unit</b>     |  |
|                              | Suresh K. Suryawanshi  |  | 2115                |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10/28/05 amendments.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 and 16-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 and 16-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. Claims 1-14 and 16-21 are presented for examination.

#### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-10 and 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Humpherys et al (US Patent No. 6,098,143<sup>1</sup>; hereinafter Humpherys) in view of Wong (US Patent No. 6,528,904).

4. As per claim 1, Humpherys discloses a server system comprising:

a plurality of printed circuit assemblies [Fig. 1; col. 2, line 66 -- col. 3, line 13];

---

<sup>1</sup> Prior art cited by the examiner in the prior office action.

a server management card coupled to the plurality of printed circuit assemblies for monitoring and managing operation of the server system [Fig. 1; col. 3, lines 14-22, 50-54; col. 7, lines 35-40], the server management card receiving and storing status information from the plurality of printed circuit assemblies [Fig. 2; buffer, flash ROM and DRAM storing means; col. 7, lines 50-59], the server management card including a plurality of interfaces for configuring the server management card and accessing the stored status information from the server management card [Fig. 1; server management board connected to a display and a keyboard; Fig. 2; Modem and NIC connections; col. 3, lines 12-13; col. 4, lines 1-12; col. 7, lines 35-40].

Humpherys does not expressly disclose that the server system contains a plurality of host processor cards. However, Wong expressly discloses about a server having a plurality of host processor cards with a server management card [Fig. 1; col. 2, lines 17-18, 30-43]. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the cited references as both are directed to a server system having a server management card for monitoring the server system. Moreover, the disclosed inventions will benefit from each other because one provides an advance server where one can have a plurality of processor cards with a server management card and other clearly provides all kinds of techniques for monitoring the server via the server management card.

Art Unit: 2115

5. As per claim 20, Humpherys discloses a server management card for managing the operation of a server system, the server system including a plurality of cards fitted in the server system [Fig. 1; a server management board], the server management card comprising:

a set of bus inputs for receiving status information via at least one system bus from the plurality of cards fitted in the server system [Fig. 1];

a memory for storing the received status information [Fig. 1 and 2; buffer, Flash ROM and DRAM; col. 7, lines 50-59]; and

a plurality of user interfaces for allowing a user to access the server management card, configure the server management card, and access the stored status information [Fig. 1 and 2; col. 3, lines 13-14; col. 4, lines 1-12; a server management board connected to at least a display, a keyboard and further having a Modem and a NIC connectors], the plurality of user interfaces including a LAN interface configured to be coupled to management LAN [Fig. 2; NIC interface; col. 4, lines 1-12].

Humpherys does not expressly disclose that the server system contains a plurality of host processor cards. However, Wong expressly discloses about a server having a plurality of host processor cards with a server management card [Fig. 1; col. 2, lines 17-18, 30-43]. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the cited references as both are directed to a server system having a server management

Art Unit: 2115

card for monitoring the server system. Moreover, the disclosed inventions will benefit from each other because one provides an advance server where one can have a plurality of processor cards with a server management card and other clearly provides all kinds of techniques for monitoring the server via the server management card.

6. As per claim 2, Humpherys discloses that the plurality of interfaces to the server management card include at least one serial port interface and at least one LAN interface [Fig. 1 and 2; col. 3, lines 13-14; col. 4, lines 1-12; a server management board connected to at least a display, a keyboard and further having a Modem and a NIC connectors].

7. As per claim 3, Humpherys discloses that the LAN interface is configured to be coupled to a server management LAN [Fig. 1 and 2; col. 3, lines 13-14; col. 4, lines 1-12; a server management board connected to at least a display, a keyboard and further having a Modem and a NIC connectors; inherent to a system having a server management board with NIC to be configurable to connect a server management LAN].

8. As per claim 6, Humpherys discloses that multiple connections through the plurality of interfaces to the server management card may be active at one time [Fig. 1 and 2; col. 3, lines 13-14; col. 4, lines 1-12; a server management board connected to a display, a keyboard, a Modem and a NIC; these all could be in connection at one time].

Art Unit: 2115

9. As per claim 8, Humpherys discloses that the server management card is configured to communicate via a telnet protocol through at least one of the plurality of interfaces to the server management card [Fig. 2; inherent to a system having a server management board with Modem/NIC to be configurable to communicate via a telnet].

10. As per claim 9, Wong discloses about a backplane and use of I<sup>2</sup>C bus [Fig. 1; col. 2, lines 17-25].

11. As per claim 21, Humpherys discloses that the LAN interface is dedicated to management LAN communications [Fig. 2; inherent to a system having a server management board with NIC to be configurable to connect a server management LAN].

12. Claims 11-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Humpherys et al (US Patent No. 6,098,143<sup>1</sup>; hereinafter Humpherys) in view of Diesing et al (US Patent No. 6,701,360; hereinafter Diesing).

13. As per claim 11, Humpherys discloses a method of communicating with a server system to configure the server system and obtain status information from cards fitted in the server system [Fig. 1; col. 1, lines 10-17, 36-39], the method comprising:

providing a management card in the server system including a plurality of user interfaces [Fig. 1; col. 3, lines 13-14; col. 4, lines 1-12; a server management board connected to at least a monitor, a keyboard and further having a Modem and a NIC connectors];

transmitting status information from the cards fitted in the server system to the management card [Fig. 1; col. 1, lines 10-17, 36-39; col. 7, lines 35-40, 50-59];

receiving the status information from the management card via one of the plurality of user interfaces [Fig. 1; col. 3, lines 12-13; a display device; col. 4, lines 1-12; Modem/NIC connection];

transmitting configuration information through one of the plurality of user interfaces to the management card [Fig. 1; col. 3, lines 12-13; a keyboard; col. 4, lines 1-12; Modem/NIC connection];

storing the configuration information on the management card [Fig. 1 and 2; buffer, Flash ROM and DRAM; col. 7, lines 50-59]; and

providing multiple simultaneously active connections through the plurality of user interfaces to the management card [Fig. 1 and 2; col. 3, lines 13-14; col. 4, lines 1-12; a server



Art Unit: 2115

management board connected to at least a display, a keyboard and further having a Modem and a NIC connectors].

Humpherys does not expressly disclose allowing multiple users to simultaneously access the management card. However, Diesing clearly discloses a server system where multiple users can simultaneously access and monitor a partition or a plurality of partitions where a partition can be considered an independent server or a management card [col. 2, lines 18-26; col. 3, lines 49-52; col. 3, line 66 -- col. 4, line 21; col. 4, lines 33-52; col. 5, lines 20-33; col. 7, lines 18-30]. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the cited references as both are directed to a server system maintenance access. Moreover, the system disclosed by Humpherys will clearly be benefited by the system disclosed by Diesing because now more than one user will be able to access the maintenance area. Plus, simultaneous access will provide a watch over benefit too as if one makes a mistake, another could catch it and point it out immediately. Thus, it also creates a great tool to train a junior person.

14. As per claim 13, Humpherys discloses that the LAN interface is configured to be coupled to a server management LAN [Fig. 1 and 2; col. 3, lines 13-14; col. 4, lines 1-12; a server management board connected to at least a display, a keyboard and further having a Modem and a NIC connectors; inherent to a system having a server management board with NIC to be configurable to connect a server management LAN].

Art Unit: 2115

15. As per claim 17, Humpherys discloses that the server management card is configured to communicate via a telnet protocol through at least one of the plurality of interfaces to the server management card [Fig. 2; inherent to a system having a server management board with Modem/NIC to be configurable to communicate via a telnet].

16. As per claim 19, Diesing discloses about limited user access [col. 5, lines 19-33; one user logs in for monitor purposes only while another user can login as an administrator or configurator].

17. Claims 4-5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Humpherys et al (US Patent No. 6,098,143<sup>1</sup>; hereinafter Humpherys), Wong (US Patent No. 6,528,904) and in view of Gallagher et al (US Patent No. 5,971,804<sup>1</sup>; hereinafter Gallagher).

18. As per claim 4, Humpherys and Wong disclose the invention substantially. Humpherys and Wong do not expressly disclose about use of a LCD panel mounted on the server system. But, Humpherys clearly discloses use of a display [Fig. 1]. However, Gallagher expressly discloses a well-known use of a flat panel display and keyboard with trackball mounted on a server [Fig. 3A; col. 6, lines 5-7]. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the cited references as they are related to provide the status, control and communication interfaces for the server. Moreover, a routineer would like to use a LCD panel mounted on the server system at least the benefit of saving spacing required by a display monitor.

19. As per claim 5, Humpherys and Wong disclose the invention substantially. Humpherys and Wong do not expressly disclose about use of a couple of LCD panels mounted on the server system. But, Humpherys clearly discloses use of a display [Fig. 1]. Though Gallagher expressly discloses a well-known use of a flat panel display mounted on a server [Fig. 3A; col. 6, lines 5-7], Gallagher do not expressly disclose about a second flat panel display mounted on the server. However, a routineer in the art would be able to couple a second LCD panel on a different side of the server as a redundant LCD panel. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have a second LCD panel mounted on back of the server system as a redundant panel. Moreover, a routineer would be interested to have more than one LCD user interfaces as this does not require any extra spacing but it will provide a backup user interface.

20. As per claim 7, Humpherys and Wong disclose the invention substantially. Humpherys and Wong do not disclose about a mirrored connection. However, Gallagher discloses such mirrored connection for redundancy purpose [col. 7, lines 9-41; redundant control station]. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the cited references as they are related to provide the status, control and communication interface for the server. Moreover, having a redundancy is clearly beneficial as a backup in case the master connection does not work.

21. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Humpherys et al (US Patent No. 6,098,143<sup>1</sup>; hereinafter Humpherys), Wong (US Patent No. 6,528,904) and in view of Nouri et al (US Patent No. 6,088,816<sup>1</sup>; hereinafter Nouri).

22. As per claim 10, Humpherys and Wong disclose the invention substantially. Humpherys and Wong do not expressly disclose about limited user accesses. But it is well known in the art to have different levels of user access in a network environment for security reasons. However, Nouri clearly discloses about requiring a correct password entry before a user could access the remote interface [col. 14, lines 8-17; col. 16, lines 53-62]. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the cited references as they are related to displaying a server system status. Moreover, a routineer would use password and user id based user access levels at least for the reason of security purpose and avoiding any wrong or incorrect configuration setting by an unauthorized user.

23. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Humpherys et al (US Patent No. 6,098,143<sup>1</sup>; hereinafter Humpherys), Diesing et al (US Patent No. 6,701,360; hereinafter Diesing) and in view of Nouri et al (US Patent No. 6,088,816<sup>1</sup>; hereinafter Nouri).

Art Unit: 2115

24. As per claim 18, Humpherys and Diesing disclose the invention substantially.

Humpherys and Diesing do not expressly disclose about use of I<sup>2</sup>C bus. However, Nouri clearly discloses the well-known knowledge I<sup>2</sup>C buses [col. 9, line 30 -- col. 10, line 61]. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the cited references as they are related to displaying a server system status. Moreover, a routineer would utilize I<sup>2</sup>C bus to improve the design flexibility and to decrease system cost and hardware complexity.

25. Claims 12, 14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Humpherys et al (US Patent No. 6,098,143<sup>1</sup>; hereinafter Humpherys), Diesing et al (US Patent No. 6,701,360; hereinafter Diesing) and in view of Gallagher et al (US Patent No. 5,971,804<sup>1</sup>; hereinafter Gallagher).

26. As per claim 12, Humpherys and Diesing disclose the invention substantially.

Humpherys and Diesing do not expressly disclose about use of a LCD panel mounted on the server system. But, Humpherys clearly discloses use of a display [Fig. 1]. However, Gallagher expressly discloses a well-known use of a flat panel display and keyboard with trackball mounted on a server [Fig. 3A; col. 6, lines 5-7]. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the cited references as they are related to provide the status, control and communication interfaces for the server. Moreover, a routineer would like to use a LCD panel mounted on the server system at least the benefit of saving spacing required by a display monitor.

27. As per claim 14, Humpherys and Diesing disclose the invention substantially.

Humpherys and Diesing do not expressly disclose about use of a couple of LCD panels mounted on the server system. But, Humpherys clearly discloses use of a display [Fig. 1]. Though Gallagher expressly discloses a well-known use of a flat panel display mounted on a server [Fig. 3A; col. 6, lines 5-7], Gallagher do not expressly disclose about a second flat panel display mounted on the server. However, a routineer in the art would be able to couple a second LCD panel on a different side of the server as a redundant LCD panel. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have a second LCD panel mounted on back of the server system as a redundant panel. Moreover, a routineer would be interested to have more than one LCD user interfaces as this does not require any extra spacing but it will provide a backup user interface.

28. As per claim 16, Humpherys and Diesing disclose the invention substantially.

Humpherys and Diesing do not disclose about a mirrored connection. However, Gallagher discloses such mirrored connection for redundancy purpose [col. 7, lines 9-41; redundant control station]. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the cited references as they are related to provide the status, control and communication interface for the server. Moreover, having a redundancy is clearly beneficial as a backup in case the master connection does not work.

***Response to Arguments***

29. Applicant's arguments with respect to claims 1-14 and 16-21 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Suresh K. Suryawanshi whose telephone number is 571-272-3668. The examiner can normally be reached on 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas C. Lee can be reached on 571-272-3667. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

sks

December 27, 2005



**CHUN CAO  
PRIMARY EXAMINER**